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29689 DAVID A. GUI	7590 10/01/200 E RRA	EXAMINER		
INTERNATIONAL PATENT GROUP, LLC			STULII, VERA	
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CANADA			1794	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
Office Action Comments	10/595,176	BJORNESET ET AL.			
Office Action Summary	Examiner	Art Unit			
	VERA STULII	1794			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on					
	-· action is non-final.				
<i>,</i> —	, 				
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
·		0 0.0. 2.0.			
Disposition of Claims					
 4) ☐ Claim(s) 14-33 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 14-33 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. 					
Application Papers					
 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 					
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) Notice of References Cited (PTO-892)					

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims14-17, 19,20-25, 31 and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 17, 31 and 33 are rendered indefinite for the recitation of "salt of said organic acid is selected from the group consisting of a sodium-salt, potassium-salt, and calciumsalt, said salt has a maximum carbon chain length of 10 carbon atoms, wherein said organic acid may be straight or branched and may be single or multivalent, said organic acid is selected form the group consisting of lactic cid, citric acid, malic acid, acetic acid, and fumaric acid". A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in Ex parte Wu, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of Ex parte Steigewald, 131

USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 17, 31, 33 recite the broad recitation "said salt has a maximum carbon chain length of 10 carbon atoms", and the claim also recites "said organic acid is selected form the group consisting of lactic cid, citric acid, malic acid, acetic acid, and fumaric acid" which is the narrower statement of the range/limitation.

Claim 14 is rendered indefinite for the recitation of the term "matting". The term appears to be a literal translation into English from a foreign document. The only definition of "matting" found by Examiner refers to mounting a photograph to a mat board into which an opening the size of the photograph has been cut. No association with ground fish or any food product has been found. Clarification or correction is required.

Claim 14 is rendered indefinite for the recitation of the phrase " adding trehalose and adding organic acid". It is not clear as to what trehalose and organic acid are added to.

Claim 14 recites the limitation "said fish meat end product" in line 8. Claim 15, 16 and 20-25 also recite the limitation "said fish meat end product". There is insufficient antecedent basis for this limitation in the claims.

Claims 20-25 are rendered indefinite for the recitation of adding various ingredients to the "end product". It is not clear whether the ingredients are added after the product is formed or the ingredients are added to the fish to form the end product.

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Claim 19 is rendered indefinite for the recitation of the phrase "the originally added amount of fluid". It is not clear as to what "originally added fluid" the claim is referring to, since the previous claims do not recite any original fluid.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 14-17 and 26-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeda et al (JP 10-146172).

In regard to claim 14 and 27, Takeda et al disclose a process for producing a fish meat product from ground fish comprising the steps of grinding fish meat, adding trehalose, adding at least one salt of an organic acid and freezing the fish meat end product ([0007]-[0011] of the machine translation). In regard to claim 27, it is noted that ground fish product is subjected to freezing and is intended for the future consumption, and therefore is intended to be thawed.

In regard to claims 15 and 29, Takeda et al discloses from 0.1 to 5% by weight of the organic acid salt ([0008] of the machine translation).

In regard to claims 16 and 30, Takeda et al discloses from 2 to 20% by weight trehalose ([0008] of the machine translation).

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In regard to claims 17 and 31, Takeda et al discloses sodium lactate and potassium lactate ([0011] of the machine translation).

In regard to claims 26 and 28, Takeda et al discloses salmon, Pacific whiting and Pollack ([0009] of the machine translation).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 18 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al (JP 10-146172).

In regard to claims 18 and 33, Takeda et al discloses polyphosphates ([0011] of the machine translation). In particular, Takeda discloses sodium and potassium salts of pyrophosphoric acid and metaphosphoric acids. Takeda et al is silent as to the dipolyphosphates and tri- polyphosphates. One of ordinary skill in the art would have

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been motivated to modify Takeda et al and to employ any food grade polyphosphates suitable for meat product.

Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al (JP 10-146172) in view of Kato (JP 57146559).

Takeda is taken as cited above. Takeda is silent as to the added water and chloride.

In regard to claims 19 and 20, Kato discloses frozen fish paste (Abstract). Kato discloses fish meat containing a large amount of water is prepared by separating the meat from a fish body and immersing in running water, adding potassium chloride and saccharides, grinding to obtain viscous meat paste and freezing. One of ordinary skill in the art would have been motivated to modify Takeda et al and to add water and potassium chloride to the fish paste in order to produce fish product having desired organoleptic profile, consistency and viscosity. One of ordinary skill in the art would have been motivated to do so, since adding chloride salts and water to ground meat products was a well established fact in the art. One of ordinary skill in the art would have been motivated to modify amount of water added to the paste depending on the fish particle size of the paste, desired consistency and viscosity of the paste, and the culinary product for which fish paste is intended.

Claims 21, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al (JP 10-146172) in view of Takeda LTD (JP 54126758).

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Takeda is taken as cited above. Takeda is silent as to the starch ingredients, vegetable or animal proteins. Takeda LTD discloses improving quality of frozen ground fish and reducing denaturation during preservation by addition of corn (maize) starch, vegetable proteins (soybean protein, wheat protein) and animal proteins (milk protein) (Abstract). One of ordinary skill in the art would have been motivated to modify Takeda et al in view of Takeda LTD and to include corn (maize) starch, vegetable proteins (soybean protein, wheat protein) and animal proteins (milk protein) in the fish paste composition for the benefits as disclosed by Takeda LTD. One of ordinary skill in the art would have been motivated to do so, in order to improve the quality of frozen ground fish and to reduce denaturation during preservation.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al (JP 10-146172) in view of Kato et al (JP 01281061)

Takeda is taken as cited above. Takeda is silent as to the hydrocolloids. Kato discloses including potassium alginate into the ground fish composition in order to reduce deterioration during frozen storage (Abstract). One of ordinary skill in the art would have been motivated to modify Takeda et al in view of Kato and to include potassium alginate into the ground fish composition in order to reduce deterioration during frozen storage as taught by Kato (Abstract).

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al (JP 10-146172) in view of Kikuchi (JP 2002281942).

Takeda is taken as cited above. Takeda is silent as to the vegetable fiber added to the fish paste. Kikuchi et al discloses frozen fish paste products (Abstract). Kikuchi et

al discloses that by addition of fiber, proteins and starches the food product is produced that is "is soft, have juicy feeling, improved food quality and the broth outflow is prevented". One of ordinary skill in the art would have been motivated to modify Takeda et al in view of Kikuchi and to add any edible fiber, including vegetable fiber, to the fish paste composition for the benefits as disclosed by Kikuchi. One of ordinary skill in the art would have been motivated to do so in order to produce fish paste product that is "soft, juicy and has improved food quality". One of ordinary skill in the art would have been further motivated to do so, in order to bind water contained in the fish paste and to therefore to prevent "the broth outflow" as disclosed by Kikuchi et al.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al (JP 10-146172) in view of Kato (JP 57146559), Takeda LTD (JP 54126758), Kato et al (JP 01281061) and Kikuchi (JP 2002281942).

Takeda, Kato'559, Takeda LTD, Kato'061 and Kikuchi are taken as cited above. Takeda is silent as to the added water, chloride, starch ingredients, vegetable or animal proteins, hydrocolloids and vegetable fiber added to the fish paste.

One of ordinary skill in the art would have been motivated to modify Takeda et al in view of Kato' 559 and to add water and potassium chloride to the fish paste in order to produce fish product having desired organoleptic profile, consistency and viscosity.

One of ordinary skill in the art would have been motivated to do so, since adding chloride salts and water to ground meat products was a well established fact in the art.

One of ordinary skill in the art would have been motivated to modify Takeda et al in view of Takeda LTD and to include corn (maize) starch, vegetable proteins (soybean

protein, wheat protein) and animal proteins (milk protein) in the fish paste composition for the benefits as disclosed by Takeda LTD. One of ordinary skill in the art would have been motivated to do so, in order to improve the quality of frozen ground fish and to reduce denaturation during preservation. One of ordinary skill in the art would have been motivated to modify Takeda et al in view of Kato'061 and to include potassium alginate into the ground fish composition in order to reduce deterioration during frozen storage as taught by Kato (Abstract). One of ordinary skill in the art would have been motivated to modify Takeda et al in view of Kikuchi and to add any edible fiber, including vegetable fiber, to the fish paste composition for the benefits as disclosed by Kikuchi. One of ordinary skill in the art would have been motivated to do so in order to produce fish paste product that is "soft, juicy and has improved food quality". One of ordinary skill in the art would have been further motivated to do so, in order to bind water contained in the fish paste and to therefore to prevent "the broth outflow" as disclosed by Kikuchi et al.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VERA STULII whose telephone number is (571)272-3221. The examiner can normally be reached on 7:00 am-3:30 pm, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lien Tran/ Primary Examiner Art Unit 1794 /Vera Stulii/ Examiner, Art Unit 1794